What is claimed is:

1. A method of treating or preventing hepatitis C virus infection in a subject which comprises administering an effective amount of an agent to the subject, wherein the agent is capable of specifically binding to the HCV core protein so as to inhibit hepatitis C virus replication.

2. The method of claim 1, wherein the hepatitis C virus infects the liver of the subject.

3. The method of claim 1, wherein the hepatitis C virus infects the liver of a human.

4. The method of claim 1, wherein the agent is capable of specifically binding to the HCV core protein having an amino acid sequence of Figure 2, SEQ ID NO:1.

5. The method of claim 1, wherein the agent binds to the cytoplasmic domain of HCV core protein which comprises amino acid residues 1-123 of said HCV core protein of Figure 2, SEQ ID NO:1.

6. The method of claim 1, wherein the agent is a polypeptide, a pseudo enzyme, a peptidomimetic compound, a nucleic acid molecule, an antibody or variant thereof.

7. The method of claim 1, wherein the agent comprises a cellular protein.

8. The method of claim 7, wherein the cellular protein comprises a DEAD-box protein, or a 14-3-3 protein.

9. The method of claim 8, wherein the DEAD box protein comprises a DEAD box RNA helicase.

10. The method of claim 9, wherein the DEAD-box RNA helicase comprises a human DEAD-box protein DBX or a variant thereof.

11. The method of claim 10, wherein the human DEAD-box protein DBX comprises the amino acid sequence of Figure 2, SEQ ID NO:1.

12. The method of claim 10, wherein the variant of the human DEAD-box protein DBX comprises the amino acid sequence of Figure 2, SEQ ID NO:2.

13. The method of claim 10, wherein the variant of the human DEAD-box protein DBX comprises the amino acid sequence of Figure 3, SEQ ID NO:3.

14. The method of claim 10, wherein the variant of the human DEAD-box protein DBX comprises 100-200 amino acid residues which mimics the amino acid sequence of Figure 2, SEQ ID NO:1 or the amino acid sequence of Figure 3, SEQ ID NO:3.

15. The method of claim 8, wherein the 14-3-3 protein comprises the amino acid sequence of Figure 4, SEQ ID NO:5 or a variant thereof.

16. The method of claim 15, wherein the variant of said 14-3-3 protein comprises 50-200 amino acid residues which mimics the active site of said 14-3-3 protein of Figure 4, SEQ ID NO:5.

17. The method of claim 1, wherein the agent comprises

nucleic acid molecule encoding DEAD-box protein of Figure 2, SEQ ID NO:1 or a variant thereof.

18. The method of claim 1, wherein the agent comprises nucleic acid molecule encoding 14-3-3 protein of Figure 4, SEQ ID NO:5 or a variant thereof.

19. The method of claim 1, wherein the agent is administered with a pharmaceutically acceptable carrier.

20. A method of identifying a compound which can inhibit the replication of HCV, wherein said compound inhibits hepatitis C virus replication by inhibiting the interactions between HCV core protein and an agent capable of specifically binding to said HCV core protein, comprising:

a) incubating said compound, the HCV core protein and said agent under a suitable reaction conditions,

b) determining the interaction between the HCV core protein and said agent in the presence of said compound, and

c) comparing the interaction in step (b) with the interaction between the HCV core protein and said agent in the absence of said compound so as to identify a compound which can inhibit the replication of hepatitis C virus by inhibiting interactions between HCV core protein and said agent.

21. The method of claim 20, wherein the agent is known to bind to HCV core protein.

22. The method of claim 20, wherein the inhibition of hepatitis C virus replication is in a subject.

23. The method of claim 22, wherein the inhibition of hepatitis C virus infection is in the liver of the subject.

24. The method of claim 22, wherein the inhibition of hepatitis C virus infection is in the liver of a human.

25. The method of claim 20, wherein the agent is a polypeptide, a pseudo enzyme, a peptidomimetic compound, a nucleic acid molecule, an antibody or variant thereof.

26. The method of claim 20, wherein the agent comprises a cellular protein.

27. The method of claim 26, wherein the cellular protein comprises a DEAD-box protein, or a 14-3-3 protein.

28. The method of claim 27, wherein the DEAD box protein comprises a DEAD box RNA helicase.

29. The method of claim 28, wherein the DEAD-box RNA helicase comprises a human DEAD-box protein DBX or a variant thereof.

30. The method of claim 29, wherein the DEAD-box protein DBX comprises the amino acid sequence of Figure 2, SEQ ID NO:1.

31. The method of claim 29, wherein the variant of the

human DEAD-box protein DBX comprises the amino acid sequence of Figure 2, SEQ ID NO:2.

32. The method of claim 29, wherein the variant of the human DEAD-box protein DBX comprises the amino acid sequence of Figure 3, SEQ ID NO:3.

33. The method of claim 29, wherein the variant of the human DEAD-box protein DBX comprises 100-200 amino acid residues which mimics the amino acid sequence of Figure 2, SEQ ID NO:2 or the amino acid sequence of Figure 3, SEQ ID NO:3.

34. The method of claim 27, wherein the 14-3-3 protein comprises the amino acid sequence of Figure 4, SEQ ID NO:5 or a variant thereof.

35. The method of claim 29, wherein the variant of said 14-3-3 protein comprises 50-200 amino acid residues which mimics the active site of said 14-3-3 protein of Figure 4, SEQ ID NO:5.

36. The method of claim 20, wherein the agent comprises nucleic acid molecule encoding DEAD-box protein of Figure 2, SEQ ID NO:1 or a variant thereof.

37. The method of claim 20, wherein the agent comprises nucleic acid molecule encoding 14-3-3 protein of Figure 4, SEQ ID NO:5 or a variant thereof.

38. The method of claim 20, wherein the agent is administered with a pharmaceutically acceptable carrier.

39. The method of claim 20, wherein the inhibition of

hepatitis C virus replication is *in vitro*.

40. The method of claim 22, wherein the subject is a mammal.

41. The method of claim 22, wherein the subject is a human.

42. The method of claim 20, wherein the binding between the HCV core protein and the agent is measured by yeast two-hybrid screening.

43. The method of claim 20, wherein the compound is not previously known.

44. The compound identified by the method of claim 43.

45. A method for determining whether a compound can treat or prevent hepatitis C virus infection in a subject, comprising:

a) incubating said compound, the HCV core protein and an agent capable of specifically binding to said HCV core protein under a suitable reaction conditions,

b) determining the binding between the HCV core protein and said agent in the presence of said compound, and

c) comparing the binding in step (b) with the binding between the HCV core protein and said agent in the absence of said compound so as to identify a compound which can treat or prevent hepatitis C virus infection in a subject, wherein said compound treats or prevents

hepatitis C virus infection by specifically inhibiting the binding of HCV core protein and said agent so as to suppress hepatitis C virus replication.

46. The method of claim 45, wherein the agent is known to bind to HCV core protein.

47. The method of claim 45, wherein the subject is a mammal.

48. The method of claim 45, wherein the subject is a human.

49. The method of claim 45, wherein the hepatitis C virus infection is in the liver of a subject.

50. The method of claim 45, wherein the hepatitis C virus infection is in the liver of a human.

51. The method of claim 45, wherein the compound can be administered orally or by injection.

52. The method of claim 45, wherein the compound is not previously known.

53. The method of claim 52, wherein the compound is identified by the method.

54. The method of claim 45, wherein the agent is a polypeptide, a pseudo enzyme, a peptidomimetic, a nucleic acid molecule, an antibody or variant thereof.

55. The method of claim 45, wherein the agent comprises a cellular protein.

56. The method of claim 55, wherein the cellular protein comprises a DEAD-box protein, or a 14-3-3 protein.

57. The method of claim 56, wherein the DEAD box protein comprises a DEAD box RNA helicase.

58. The method of claim 57, wherein the DEAD-box RNA helicase comprises a human DEAD-box protein DBX or a variant thereof.

59. The method of claim 58, wherein the human DEAD-box protein DBX comprises the amino acid sequence of Figure 2, SEQ ID NO:1.

60. The method of claim 58, wherein the variant of the human DEAD-box protein DBX comprises the amino acid sequence of Figure 2, SEQ ID NO:2.

61. The method of claim 58, wherein the variant of the human DEAD-box protein DBX comprises the amino acid sequence of Figure 3, SEQ ID NO:3.

62. The method of claim 58, wherein the variant of the human DEAD-box protein DBX comprises 100-200 amino acid residues which mimics the amino acid sequence of Figure 2, SEQ ID NO:2 or the amino acid sequence of Figure 3, SEQ ID NO:3.

63. The method of claim 56, wherein the 14-3-3 protein comprises the amino acid sequence of Figure 4, SEQ ID NO:5 or a variant thereof.

64. The method of claim 63, wherein the variant of said 14-3-3 protein comprises 50-200 amino acid residues

which mimics the active site of said 14-3-3 protein of Figure 4, SEQ ID NO:5.

65. The method of claim 45, wherein the agent comprises nucleic acid molecule encoding DEAD-box protein of Figure 2, SEQ ID NO:1 or a variant thereof.

66. The method of claim 45, wherein the agent comprises nucleic acid molecule encoding 14-3-3 protein of Figure 4, SEQ ID NO:5 or a variant thereof.

67. The method of claim 45, wherein the agent is administered with a pharmaceutically acceptable carrier.

68. A composition comprising an effective amount of the compound identified by the method of claim 45 wherein the compound is capable of inhibiting the binding between hepatitis C virus core protein and a cellular protein.

69. A pharmaceutical composition comprising an effective amount of the compound identified by the method of claim 45, wherein the compound is capable of treating or preventing hepatitis C virus infection.

70. A composition for inhibiting cell growth, comprises a HCV core protein or a variant thereof, wherein said HCV core protein or its variant inhibit cancer cell growth by inhibiting ~~the cellular~~ DEAD box proteins.

71. The composition of claim 70, wherein the cell comprises cancer cell.